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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/588,457

08/04/2006

Dieter Lubda

MERCK-3201

5754

23599

7590

04/07/2009

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EXAMINER

CHANG, HANWAY

ART UNIT

PAPER NUMBER

2881

MAIL DATE

DELIVERY MODE

04/07/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/588,457 | <b>Applicant(s)</b><br>LUBDA ET AL. |  |
|                              | <b>Examiner</b><br>Hanway Chang      | <b>Art Unit</b><br>2881             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/04/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (US Pat. 6,525,313, hereinafter Park).

Regarding claims 1 and 2, Fig. 5C of Park discloses a capillary (31) (see col. 8, lines 43-52) characterized in that the capillary (31) is sheathed with a gold foil (33) (see col. 7, lines 27-30).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lubda et al. (US PGPub 2003/0155676, hereinafter Lubda).

Regarding claims 3-5 and 9, a difference between Park and the claimed invention is the capillary is filled with an inorganic monolithic sorbent. However, in the same field of endeavor, Lubda discloses a capillary that is filled with an inorganic

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monolithic sorbent (see paragraphs [0026-0027]). It should be noted that the sorbent discussed in the cited paragraphs are inorganic as discussed paragraphs [0042-0043]). Lubda teaches that it is advantageous to have an inorganic monolithic sorbent within the capillary as it gives on average significantly better separation efficiencies (see paragraph [0048]). In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to modify the invention of Park by filling the capillary with inorganic monolithic sorbent for the purpose of increasing separation efficiencies in the capillary.

Regarding claim 6, Fig. 5C of Park discloses that the capillary end sheathed with metal foil is pointed externally (see col. 7, lines 18-30).

Regarding claim 7, Fig. 5C of Park discloses that the capillary is empty and the end sheathed with metal foil is tapered internally and externally (see col. 7, lines 18-30).

Regarding claims 8 and 10-11, Fig. 1 of Park discloses a mass spectrometric analytical instrument wherein at least having a capillary (20) for carrying out separations (see col. 2, lines 23-25) within an ionization source (101) (see col. 2, lines 11-14). While Fig. 1 of Park does not explicitly show a mass spectrometric analytical instrument, it is well known in the art that mass spectrometers have an ionization source (such as AP-ESI as shown in Fig. 1). Furthermore, Fig. 1 of Park does not show the capillary is sheathed with metal foil. However, Fig. 5C of Park discloses a capillary is sheathed with metal foil. In view of such teaching, it would have been obvious to the ordinary artisan at the time the invention was made to have the capillary sheathed with metal foil to be the capillary (20) of Fig. 1 as well as having the end facing the mass spectrometric

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analytical instrument for the purpose of configuring a working ionization source for mass spectrometry. It should be noted that the method must be used by the device above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanway Chang whose telephone number is (571)270-5766. The examiner can normally be reached on Monday to Thursday 7:30 AM till 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hanway Chang  
April 3, 2009

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/H. C./

Examiner, Art Unit 2881

/ROBERT KIM/

Supervisory Patent Examiner, Art Unit 2881